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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,777	12/12/2000	Antonius A.M. Staring	PHN 17,813	4699

24737 7590 01/13/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
NORRIS, TREMAYNE M	
ART UNIT	**PAPER NUMBER**
2137	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/734,777	STARING, ANTONIUS A.M.	
	Examiner	Art Unit	
	Tremayne M. Norris	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/9/04 have been fully considered but they are not persuasive. Applicant contends that the Komuro reference does not teach "...the encrypted part of the data field including a sub-field designated as a key check block field" as stated in claim 1 as the Komuro reference teaches that the EMI is transmitted in an unencrypted state. Examiner agrees that the Komuro reference does not teach this limitation of claim 1, however, Examiner never asserted in the Office Action that Komuro taught this limitation. Examiner stated that the Gray reference taught the limitation of "the encrypted part of the data field including a sub-field designated as a key check block field" (col.5 lines 55-64) as stated in the original Office Action. Examiner also acknowledges that Komuro does not teach "...by causing the decryptor to decrypt the data in the key check block field of the received packet under control of each time a different one of the plurality of candidate sink session keys until a valid decryption result is found." However, Examiner also contends that the Komuro reference was not used to reject this particular limitation. Gray teaches "...by causing the decryptor to decrypt the data in the key check block field of the received packet under control of each time a different one of the plurality of candidate sink session keys until a valid decryption result is found" (col.5 line 65 thru col.6 line 27).

Applicant argues that Gray does not teach that the keys are generated in a "predetermined sequence." However, Gray does teach that the session keys are

generated "periodically" (col.2 lines 35-36). Examiner believes that an event happening "periodically" can have the same implication as occurring in repeated cycles or at regular intervals: thus possessing a "predetermined sequence."

Specification

The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what the phrase "under control of each time" means in the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Komuro et al (US pat 6,223,285), and further in view of Gray et al (US pat 5,706,348).

Regarding claim 1, Komuro et al teach A secure communication system including a source device and at least one sink device; information being transferred from the source device to the sink device in a communication session including the transfer of a plurality of packets from the source device to the sink device; each packet including a data field for transferring a portion of the information;

the source device including:

a key generator for, at the initiative of the source device, generating an active source session key (col.9 lines 22-28);

an encryptor for encrypting at least part of the data field of a packet under control of the active source session key (col.9 lines 28-32);

the sink device including:

a key generator for generating a plurality of candidate sink session keys, where for each index in the sequence the respective sink session key corresponds to the respective source session key (col.10 lines 18-22);

a decryptor for decrypting at least part of the data field of a received packet under control of a sink session key (col.10 lines 22-27);

a key resolver (col.10 lines 16-18) operative to determine which of the candidate sink session keys corresponds to the source session key used to encrypt the encrypted part of a received packet, and to cause the decryptor to decrypt a remaining encrypted part of the data field of the packet under control of the candidate sink session key (col.10 lines 22-27).

What Gray et al teach that Komuro et al do not teach is:

generating session keys in a predetermined sequence (col.2 lines 35-36);

the encrypted part of the data field including a sub-field designated as a key check block field (col.5 lines 55-64);

by causing the decryptor to decrypt the data in the key check block field of the received packet under control of each time a different one of the plurality of candidate sink session keys until a valid decryption result is found (col.5 line 65 thru col.6 line 27). It would have been obvious to one of ordinary skill in the art to combine Komuro et al's system of transferring information using an encryption mode indicator with Gray et al's method of updating and checking keys periodically in order to enhance security by preventing data security risks (Gray et al col.2 lines 35-36; col.2 lines 47-51).

Regarding claim 2, Komuro et al and Gray et al teach a secure communication system as claimed in claim 1, in addition Gray et al teach the plain-text form of the key check block in the key check block field is a public data block (col.5 lines 55-64).

Regarding claim 4, Komuro et al and Gray et al teach a secure communication system as claimed in claim 1, in addition Gray et al teach the plain-text form of the key check block in the key check block field changes at least once during the communication session (col.2 line 35-36; col.2 lines 58-60).

Regarding claim 5, Komuro et al and Gray et al teach a secure communication system as claimed in claim 4, in addition Gray et al teach the source and sink device include corresponding key check block generators for generating the plain-text form of the key check block and effecting the change of the plain-text form of the key check block (col.4 lines 41-59; col.5 lines 55-64).

Regarding claim 6, Komuro et al and Gray et al teach a secure communication system as claimed in claim 4, in addition Gray et al teach the plain-text form of the key check block of a particular packet is derived from information transferred in a packet preceding the particular packet (col.5 lines 7-13; col.5 lines 40-64).

Regarding claim 7, Komuro et al and Gray et al teach a secure communication system as claimed in claim 4, in addition Gray et al teach the plain-text form of the key check block is derived from information transferred in a packet immediately preceding the particular packet (col.5 lines 14-17; col.5 lines 55-64).

Claims 9-12 are substantially equivalent to claim 1, therefore claims 9-12 are rejected because of similar rationale.

Allowable Subject Matter

3. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 3, the cited prior art fails to specifically teach a secure communication system as claimed in claim 1, wherein the plain-text form of the key check block in the key check block field is a data block agreed between the source and sink device before starting the transfer of the information and used for the entire communication session.

With respect to claim 8, the cited prior art fails to specifically teach a secure communication system as claimed in claim 6, wherein the plaintext form of the key check block of a particular packet is identical to the plain-text form of a predetermined data block, other than the key check block, in an encrypted part of the data field of a packet preceding the particular packet.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tremayne M. Norris whose telephone number is (571) 272-3874. The examiner can normally be reached on M-F 7:30AM-5:00PM alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tremayne Norris

December 29, 2004